

NIST and the HAVA: Continued VVSG Development

February 6, 2006

John Wack

John.Wack@nist.gov

Today's Talk

- Background
- Current EAC VVSG
- New VVSG Work
- Contact Info

NIST “Help America Vote Act” Responsibilities

- Chair Technical Guidelines Development Committee (TGDC)
- Provide technical support to TGDC in the development of voluntary voting system guidelines including:
 - Human factors
 - Security
 - Methods to detect and prevent fraud
- Accredited testing labs

NIST/TGDC Committee Structure & Coordination

- TGDC resolution (*July '04*) established 3 subcommittees to gather and analyze information:
 - Human Factors and Privacy (HFP)
 - Security and Transparency (STS)
 - Core Requirements and Testing (CRT)
- Each Subcommittee has NIST staff assigned to it.

NIST/TGDC Activities

- **July 2004:** 1st plenary session of TGDC
- **May 2005:** Provided initial recommendations for voting system guidelines (VVSG)
- **December 2005:** Final VVSG announced by the EAC
 - EAC initiated public comment period ending September 30
 - EAC requested NIST help to identify policy decisions and changes as a result of public comments
 - EAC announced official VVSG on 13 December 2005
- **September 2005:** Kicked off next round of technical guidance (VVSG 2007)
- **July 2007:** Estimated completion for TGDC's work on next VVSG version

2005 Voluntary Voting System Guidelines

- Improves the 2002 VSS by addressing:
 - Human Factors
 - VVPAT (Voter Verifiable Paper Audit Trail)
 - Wireless
 - Software Distribution and Setup Validation
 - Conformance, Glossary, Error Rates
- Sets stage for Redesigned Version
 - Human Factors
 - Independent Dual Verification

What's Next?

- NIST conducting research in usability, security, core requirements
- Working actively with TGDC on new requirements and issues
- NIST/EAC have agreed on timeline of new modules – VVPAT, Usability, IDV
- NIST NVLAP program working to accredit potential voting system testing labs
- Next TGDC meeting on March 29, 2006, at NIST – open to public

Major Goals for VVSG 2007

- A comprehensive standards guideline, a complete rewrite of 2002 VSS with updated and expanded material, to:
 - Provide complete and comprehensive guideline for vendors and test labs
 - Provide clear, usable requirements discussion with associated test methods
 - Address security and human factors developments since 2002 VSS
 - Respond to all TGDC Jan'05 resolutions

VVSG 2007 Overview

- 4 major sections:
 - A product standard, containing general and voting-activity related requirements (e.g., setup, cast, count, ...)
 - A terminology standard (NIST glossary)
 - A standard on data to be provided by testing authorities or the vendor
 - A testing standard including all test methods, testing requirements, evaluation guidelines, test cases, etc.

Current Status

- NIST basing its work on solid research and consultancy with election community
- Research underway:
 - Meetings with vendors
 - Working with usability and accessibility experts
 - Threat analysis work
 - Preliminary requirements development

Improving U.S. Voting Systems

- NIST activities supporting the Help America Vote Act

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http://vote.nist.gov

The screenshot shows a Mozilla Firefox browser window displaying the NIST Voting Systems website. The browser's address bar shows the URL <http://vote.nist.gov/index.htm>. The website has a blue header with the title "Improving U.S. Voting Systems" and the NIST logo. Below the header, there is a navigation bar with links: "Documents & Meetings", "NIST HAVA Activities", and "Contact Us". The main content area is divided into two columns. The left column contains a search bar, a list of links including "Documents & Meetings", "Public Hearings and Meetings", "About HAVA", "Technical Guidelines Development Committee (TGDC)", "National Voluntary Laboratory Accreditation Program", and "Contact Us", and the "U.S. Election Assistance Commission" logo. The right column features the heading "NIST and the Help America Vote Act (HAVA)" followed by a paragraph explaining the 2002 HAVA Act and NIST's role. Below this is a bulleted list of NIST research activities, including security of computers, methods to detect and prevent fraud, protection of voter privacy, and the role of human factors. A link "More details of NIST's role in HAVA are available here." is provided. Further down is a section titled "High-Interest Events and Items" with a list of reports, presentations, and resolutions. At the bottom, there is a section for "Documents and Material" and a footer with the text "Page created March 2005" and links to "Privacy policy / security notice / accessibility statement". The Windows taskbar at the bottom shows the Start button and several open applications, including Microsoft Office Word, the NIST Voting Systems browser window, a file named "Wack, John - Feb...", and Microsoft PowerPoint.

Improving U.S. Voting Systems - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

<http://vote.nist.gov/index.htm>

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VVSG2-20060201-dwf.pdf (application/pdf ...) Detail on COTS issues 20060203 Improving U.S. Voting Systems

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- NIST activities supporting the Help America Vote Act

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U.S. Election Assistance Commission

Page created March 2005

NIST and the Help America Vote Act (HAVA)

The 2002 Help America Vote Act has given NIST a [key role](#) in helping to realize nationwide improvements in voting systems by January 2006. To assist the Election Assistance Commission with the development of voluntary voting system guidelines, HAVA established the Technical Guidelines Development Committee (TGDC) and directs NIST to chair the TGDC. NIST research activities include:

- security of computers, computer networks, and computer data storage used in voting systems;
- methods to detect and prevent fraud;
- protection of voter privacy; and
- the role of human factors in the design and application of voting systems, including assistive technologies for individuals with disabilities (including blindness) and varying levels of literacy

[More details of NIST's role in HAVA are available here.](#)

High-Interest Events and Items

- Seminal Report: [Election Administration in the United States](#) - Joseph Harris, 1934
- [NIST Presentation at 12/13/05 EAC Public Hearing](#)
- [Resolution to Continue Authorization of the TGDC](#)
- ["Threats to Voting Systems" Workshop - October 7, 2005](#)
- [Federal Register Notice: Laboratory Accreditation Program](#)
- Official 2004 & 2005 Resolutions of the TGDC (formats: [.doc](#) and [.pdf](#))

Documents and Material - Presentations, minutes, papers, etc.

A wealth of material documenting the progress of the [Technical Guidelines Development Committee \(TGDC\)](#) as well as positions and comments from organizations and individuals is available to the public. See the ["Documents & Meetings" page](#) for a complete listing.

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Election Administration in the US



Questions?

- Next TGDC meeting on March 29, 2006
- Email: voting@nist.gov
- Website: vote.nist.gov
- My email: john.wack@nist.gov